

# Health Benefits From Ions and Ozone

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## ATMOSPHERIC ELECTRICITY

Not until 1752 was the secret of atmospheric electricity discovered – when Ben Franklin, in the U.S., and d’Alibard, a French investigator, working independently, proved that lightning occurs when thunder clouds discharge electricity. It was a reasonable explanation – foreshadowed years before when one observer had noted crackling and flashes as he rubbed a lump of amber and held it close to a finger. *“It seems in some degree to represent thunder and lightning”*, he suggested.

Another form of atmospheric electricity, more subtle than celestial phenomena, was discovered by Lemonnier, who found that an iron wire attached from the top of a building to the bottom produced sparks at times. It even vigorously attracted dust particles in fine weather, which indicated that it was electrified. The electricity must be coming from the air???

Father Giambattista Beccaria of the University of Turin made careful observations for 20 years. He finally wrote, *“It appears that nature makes extensive uses of atmospheric electricity for promoting vegetation.”* He also added, *“We have also observed that artificial electricity without sparks has the same effect on vegetation.”*



### The Beneficial Effects of Negative Ions

*“... The introduction of negative ions increased the subjective rating of alertness, atmospheric freshness, and environmental and personal warmth. Results indicated that subjects had faster reaction times and reported feeling significantly more energetic under negative Air Ion conditions than under normal air conditions.”* From – *“Influence of Negative Air Ions on Human Performance and Mood”*

It has been scientifically proven that positive ions can make some people very depressed. The benefits of exposure to relatively high concentrations of **negative ions** produced have been well-documented over decades. Literally dozens of studies published in respected journals have concluded that negative ions can have a profoundly beneficial effect on both the mind and body.

*“Fresh country air has negative ions that have been demonstrated to both treat and prevent depression.”*  
From *“Depression: The Way Out”*, by Neil Nedley, M.D.

Studies have shown that some people become **very depressed** when negative ion counts are very low, or in the wintertime (seasonal depression).

*“A high negative ion exposure appeared to be associated with feeling better about self, less sensitive, and more responsive, or innervated (energized).”* From – *August 1982 issue of “Aviation, Space, and Environmental Medicine”*

## AIR IONS

What was this electricity that these early pioneers were experiencing? Not until the latter part of the 19<sup>th</sup> Century did Elster and Geitel in Germany, and J.J. Thomson of England discover that the air contained ions – both *“positive”* and *“negative”*. The word *“ion”* comes from the Greek word for *“traveler”*. The term was first

used to describe charged atoms moving in solution. For example, when table salt is dissolved in water, the sodium chloride splits into sodium ions and chlorine ions, which will migrate to negative and positive electrodes respectively.

Air ions are somewhat different from ions in solution. Energy is needed for their formation – even the shearing of water droplets in a waterfall supplies enough energy to make the fine spray carry a considerable load of small “*negative air ions*”, while the heavier “*positive ions*” remain in the tumbling water. Ion concentrations have been measured at spas located near waterfalls to be as high as 35,000 per cubic centimeter of air.

### **URBAN AIR IS ION DEPLETED**

Modern urban environments present a different kind of air quality – *Ion Depletion*. Very few human activities add small ions to the air -- while many of them lead to ion depletion. Industrial pollutants, traffic-engendered smog, and the ducts of ventilation systems in buildings all strip ions from the air. As a result, we suffer not only the direct toxic effect of pollutants we generate, but also the long-continued exposure to air in which the normal total ion concentration of about 2,000 to 3,000 per cubic centimeter – as found in the relatively clean air of open country – is reduced to barely detectable levels. Headaches, somnolence, loss of attention, allergies, airborne bacteria and viruses, and general discomfort are just some of the initial reactions to air ion depletion.

### **TREATMENT OF DISEASE WITH IONS**

As noted in the book, “*The Ion Effect*” by Fred Soyka, 1991, electronic negative ion generators have been used for the treatment of migraines, bedsores, allergies, asthma, catarrh, hay fever, eczema, burns, emphysema, and even as a substitute for tranquilizers. It was discovered that negative ions lowers serotonin in the body, and this explains why people tend to feel more alert, stable, and energized in their presence. Dr. Kreuger found that bacteria, staphylococci, and fungi growth is halted in the presence of negative ions, which explains the “*healing side effect*”. Dr. I. Kornbluch mounted experiments at the Northeastern Hospital, University of Pennsylvania Graduate Hospital, and at the Frankford Hospital in Philadelphia, where he was able to report that 63% of patients suffering from hay fever or bronchial asthma “*have experienced partial or total relief from negative ion therapy*”. Conversely, Russian studies reveal that positive ions make breathing much more difficult.

### **ION AND OZONE SURGERY**

Russian studies have also indicated that “*atmospheric ozone and ions are the vehicles of freshness*”. In studies at the Academy of Medical Sciences, Drs. Gubernskii and Dmitriev found that 0.005 ppm (parts-per-million) to 0.02 ppm of ozone added to normal de-ozonated indoor air increased animals’ resistance to the cold, to infection, to toxic substances, and to oxygen deprivation. A general increase in the immune “biological potential” and the vital capacity of the lungs was also reported.

Produced during a thunderstorm, three atoms of oxygen combine in a temporarily stable molecule, called Ozone (O<sub>3</sub>). As soon as ozone encounters almost anything, including another ozone molecule, it breaks apart and oxidizes the substance. This includes odor-causing chemical gases, bacterial and microbial cells, and even dust particles. Ever present in fresh country and mountain air, in an average concentration of 0.03 ppm, atmospheric ozone is what gave your mother’s clothes, hanging on the clothes line, that fresh smell.

Not so surprisingly, nature uses ozone to clean the air, even in polluted cities like Los Angeles, and Mexico City, where ultraviolet light in the presence of “*photochemical smog*” produces enough ozone to break down the automobile hydrocarbons in the air. Where there is a lot of auto exhaust and sunlight, nature creates a lot of ozone to oxidize the poisons.

### **GERM KILLER**

Ozone is a disinfectant. Twin City Testing Labs in Minnesota demonstrated a steady decline in five strains of infectious micro-organisms in four hours with as little as .05 ppm of ozone. These “*bio-aerosols*”, often incubating in dirty air ducts, could be projected to be completely eliminated in 24 hours from the laboratory

testing area. It has been argued that the same disinfecting action takes place in the human sinus cavities, where invading microbes first take hold, as well as further down the respiratory tract, while breathing fresh mountain air containing trace amounts of ozone. If we go this far, it is also interesting to note that ozone is virucidal (*"East-West"* magazine, Sept 1989). Therefore, the question about its effect on the incidence of the common cold can be raised. *"East-West"* describes virus-killing medical techniques that are being researched for a wide range of diseases.

### ***"SICK BUILDING SYNDROME"***

The most detailed account of the beneficial effects of trace amounts of ozone on the respiratory system comes from Drs. Gurbernskii and Dmitriev who reported that, *"Conditioned air causes employees working in office buildings to complain of headaches, weakness, a general poor feeling, increased irritability, oxygen deprivation, and leads to increased illness, rapid fatigue, and a reduction of the capacity to be productive at work. In addition, the number of colds, flus, rheumatism, severe catarrh, upper respiratory problems, cardiovascular disorders, all increased significantly with conditioned air."*

### **OZONE - ION COMPLEX FIGHTS *"SICK BUILDING SYNDROME"***

Tests done with less than .01 ppm of ozone reveal that, *"The levels of oxygen in the blood increase relatively quickly and remain at a high level for the duration of the experiment."* They conclude by stating that, *"Atmospheric ozone has a positive effect on humans and animals. It is important to note its positive effect on the breathing system, blood composition, arterial pressure, immune system general feeling of well-being, and mental and physical work capability. The ozone-ion complex is a necessary component of fresh air that gives it a curative effect."*

If that isn't enough, we find that in the journal *"Priroda"* (1976, No. 9, pg 26), the same doctors mentioned above report that with tests of 0.005 to 0.02 ppm of ozone for two to five months, *"an increase in the resistance to the cold, to the presence of toxic substances, and to anemia was discovered."* In addition, they discovered an increase in hemoglobin and quantity of red blood corpuscles. And, there was a decrease in complaints of *"stiffness"* (3.8 times less complaints), and 44% more positive remarks in an average of 0.0075 ppm of ozone.

### **OZONE – ION GENERATORS**

The researchers have concluded, *"After analyzing the composition of air in the internal environment of a person's dwelling in all sorts of buildings, it is possible to ascertain that the optimum situation is a set of complex factors – Ozone and Ionized regime."* It is evident that it will be necessary to artificially introduce into indoor air conditioning systems the means to produce and generate a healthy environment of ozone and ion balance. Without this favorable effect the indoor air will be severely lacking of the necessary ingredients for promoting good health. Precisely reproducing quantities of ozone and ions, found in fresh air, is the best answer to revitalizing the home, office, and work place, since people spend on the average 90% of their time indoors, often with windows that are not open, or that are sealed shut for security purposes.

### **THE *"SOLUTION TO INDOOR AIR POLLUTION"***

HealthStyles4URx offers the very best in air purification products for the home, office, or commercial application. Our products have a 55-Year Track Record, with recommendation from hundreds of sources, including studies and experiments at various universities, commercial applications from businesses of all sorts, and individual applications.

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**To purchase a copy of the book, *"The Ion Effect"*, call 1.888.542.8833**